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CLAIMS

1. through 25. (Cancelled)

26. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity in a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, The method of claim 25 wherein the mold face includes a plurality of ridges and valleys, and wherein the vacuum chamber is a vacuum line network, the vacuum line network being positioned substantially coincidentally with the valleys.

27. (Currently Amended) The method of claim 25 26 wherein the vacuum chamber and vacuum holes define the only voids in the mold.

28. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity in a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

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supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, The method of claim 25 wherein the mold is of varying thickness and wherein the vacuum chamber is a vacuum line network, the vacuum line network extending through the mold in areas of lesser thickness.

29. (Currently Amended) A method of manufacturing a thermoforming mold comprising:

forming a cavity in a mold media, the cavity corresponding in shape to the thermoforming mold;

positioning a vacuum chamber in the cavity;

supplying a molten material to the cavity to cast the mold about the vacuum chamber, the molten material conforming to the cavity and defining a mold face; and

forming at least one hole in the mold extending from the mold face to the vacuum chamber to provide communication between the vacuum chamber and the mold face, The method of claim 25 wherein the vacuum chamber is a vacuum line network, the vacuum line network being laid out in a grid pattern within the mold.

30. (Original) A process for manufacturing a vacuum mold comprising:

impressing into a mold media a mold cavity corresponding in shape to a desired shape of the mold;

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suspending a vacuum chamber in the mold cavity, the vacuum chamber having an attachment means for operatively connecting the mold cavity to a vacuum supply means;

supplying a molten material to the mold cavity, the molten material filling at least a portion of the mold cavity and surrounding at least a portion of the vacuum chamber;

curing the molten material to define the mold at least partially surrounding the vacuum chamber, the mold defining a contoured face to shape a thermoformable sheet; and

defining a plurality of holes in the mold to create fluid communication between the vacuum chamber and the face.

31. (Original) The process of claim 30 wherein the vacuum chamber is a vacuum line network.

32. (Original) The process of claim 30 wherein the vacuum chamber is a vacuum cabinet.